

## California Emission Reduction

# Requirements for Diesel Truck and Equipment Owners

All owners of diesel trucks, buses, trailers and transport refrigeration units, or “reefers,” that operate in California, are required to take steps to reduce air pollution. Reducing emissions from existing equipment is necessary to meet federally imposed clean air standards and to reduce the adverse health effects from pollution. Funding opportunities may also be available to lower emissions earlier than required. This document summarizes requirements and key dates for upgrading existing equipment:

**Idling Limits** restrict diesel vehicles from idling more than five minutes, and idling in school zones is not allowed with limited exceptions.

**Emission Control Labels** must be affixed to engines of all commercial heavy-duty diesel vehicles, and must be legible as proof the engine, at minimum, meets U.S. federal emissions standards for the engine model year.

The **Heavy-Duty Vehicle Inspection Program** uses random roadside inspections to verify that diesel engines do not smoke excessively and are tamper free.

The **Periodic Smoke Inspection Program** requires owners of California based fleets of two or more diesel vehicles to perform annual smoke opacity tests and to keep records for at least two years for each vehicle. The requirement does not apply to cars or trucks that must undergo a Smog Check.

### TRUCKS AND BUSES (private and federal fleets)



Diesel trucks and buses with a GVWR more than 14,000 lbs. that are owned by private or federal government fleets must reduce exhaust emissions by meeting particulate matter (PM) filter requirements and upgrading to 2010 model year (MY) or newer engines. In addition, any person residing in California who sells an affected vehicle must provide a disclosure notice about the regulation to the buyer. For more information, go to [www.arb.ca.gov/dieseltruck](http://www.arb.ca.gov/dieseltruck).

**HEAVIER VEHICLES** with a GVWR more than 26,000 lbs. need engine upgrades as shown in the schedule below (no reporting is required).

Schedule for Heavier Trucks and Buses

Engine Year	PM Filter*	2010 MY Engine
Pre-1994	Not required	January 1, 2015
1994-1995	Not required	January 1, 2016
1996-1999	January 1, 2012	January 1, 2020
2000-2004	January 1, 2013	January 1, 2021
2005 or newer	January 1, 2014	January 1, 2022
2007-2009	Already equipped	January 1, 2023

\* 50% PM reduction can be used if 85% reduction is not available.

Instead, truck owners can report by January 31, 2012 to take advantage of credits and provisions including a 5 year PM filter phase-in option that delays replacements until January 1, 2020.

Small fleets (1-3 trucks with a GVWR more than 14,000 lbs.) must report to delay compliance until January 1, 2014.

**LIGHTER VEHICLES** with a GVWR 26,000 lbs. or less need to be upgraded to 2010 model year engines or to newer models as shown in the table. No retrofit PM filters or reporting is required.

Schedule for Lighter Trucks and Buses

Engine Year	2010 MY Engine
1995 and older	January 1, 2015
1996	January 1, 2016
1997	January 1, 2017
1998	January 1, 2018
1999	January 1, 2019
2003 and older	January 1, 2020
2004-2006	January 1, 2021
2007-2009	January 1, 2023

**ALL VEHICLES** can be kept longer with early PM retrofit filters, and trucks operated in less polluted counties in California do not need to be upgraded to have 2010 model year engines if equipped with PM filters. Fleet owners must report to take advantage of these and other provisions.

### DRAYAGE TRUCKS



Diesel-fueled trucks that transport marine cargo, containers, or transport chassis must be registered in the statewide Drayage Truck Registry prior to port or rail yard entry. For more information, call 888 247-4821 or go to [www.arb.ca.gov/drayagetruck](http://www.arb.ca.gov/drayagetruck). Drayage trucks must comply as shown in the table. Retrofit PM filters must be verified to reduce PM by 85%.

Statewide Schedule for Drayage Trucks

Compliance Date	GVWR (lbs)	Requirement
January 1, 2010	>33,000	PM filter on 1994-2003 MY engines and Pre-1994 MY engines no longer allowed
January 1, 2012*	26,001-33,000	PM filter on pre-2007 MY engines
January 1, 2012	>33,000	PM filter on 2004 MY engines
January 1, 2013	>33,000	PM filter on 2005-2006 MY engines
January 1, 2014	>26,000	All must have 2007 MY engines or newer
January 1, 2023	>26,000	All must have 2010 MY engines or newer

\* In South Coast Air Basin

## TRACTORS AND BOX-TYPE TRAILERS

The Tractor-Trailer Greenhouse Gas regulation applies to 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and all heavy-duty tractors that pull them on California highways. Any person residing in California who sells an affected vehicle must provide a disclosure notice about the regulation to the buyer. Fleets must report to take advantage of short haul, local haul or storage trailer exemptions and passes. For more information see [www.arb.ca.gov/cc/hdghg/hdghg.htm](http://www.arb.ca.gov/cc/hdghg/hdghg.htm)

**Low-rolling resistance tires** are required on all 2011 MY or newer tractors and trailers, and are required on older equipment as shown in the table below.

Low-Rolling Resistance Tires	
Date	Requirement for 2010 MY and Older Equipment
January 1, 2013	All tractors
January 1, 2017	All trailers (except 2003-2009 MY reefer trailers have until 2018-2020).

**SmartWay aerodynamic requirements** must currently be met by all 2011 MY or newer sleeper-cab tractors and trailers. Older trailers must meet the following:

SmartWay Aerodynamic Requirements	
Date	Requirement for 2010 MY and Older Trailers
July 1, 2011	Optional phase-in registration deadline for fleets with 21 or more trailers.
July 1, 2012	Optional phase-in registration deadline for small fleets with 20 or fewer trailers.
January 1, 2013	All trailers that are not using a phase-in schedule

## TRANSPORT REFRIGERATION UNITS (TRUs or Reefers)

All TRUs based outside California that operate in California must also meet the in-use standards. Every California-based TRU and TRU generator set must be registered and operator reports must be submitted and kept current at: <https://arber.arb.ca.gov/Welcome.arb?prg=tru>

Compliance schedules to reduce PM emissions are based on the engine's model year as shown in the table to the right. Engines can also be replaced with newer, cleaner engines but these too must comply with the appropriate model-year standard. For example, if an engine is replaced by a 2012 MY engine, it must be upgraded by December 31, 2019. Engines have seven years after the model year before upgrades are required.

TRU and TRU Generator Set Compliance Schedule		
Engine Model Year	Low Emission TRU (50% PM Reduction)	Ultra Low Emission TRU (85% PM Reduction)
2001 or older	December 31, 2008	December 31, 2015
2002	December 31, 2009	December 31, 2016
2003	December 31, 2010	December 31, 2017
2004 (<25 hp)	December 31, 2011	December 31, 2018
2004 (>25 hp)	Not required	December 31, 2011
2005 and newer	Not required	December 31 <sup>st</sup> of the model year +7 years

## PUBLIC FLEETS and OTHERS

Vehicles with a GVWR greater than 14,000 lbs. that are owned by state and local government fleets, private and public school buses, private utilities, and solid waste collection vehicles, must be retrofitted with the best available ARB verified PM filters or upgraded as summarized below.

Vehicle or Fleet Type	Requirement	Website
Public and Private School Buses	Must be retrofitted with PM filters from January 1, 2012, to January 1, 2014. All pre-1977 MY engines must be retired.	<a href="http://www.arb.ca.gov/dieseltruck">www.arb.ca.gov/dieseltruck</a>
Solid Waste Collection Vehicles	Nearly all 1960-2006 MY engines must be retrofitted with PM filters from January 1, 2005 to January 1, 2011.	<a href="http://www.arb.ca.gov/msprog/swcv/swcv.htm">www.arb.ca.gov/msprog/swcv/swcv.htm</a>
Public Transit Fleet Vehicles	Fleets must meet NOx and PM reduction requirements from January 1, 2008 to January 1, 2011.	<a href="http://www.arb.ca.gov/msprog/bus/bus.htm">www.arb.ca.gov/msprog/bus/bus.htm</a>
State and Local Government Vehicles and Private Utilities	Nearly all 1960 MY and newer engines must be retrofitted with PM filters from January 1, 2008 to January 1, 2013.	<a href="http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm">www.arb.ca.gov/msprog/publicfleets/publicfleets.htm</a>

## FUNDING OPPORTUNITIES

Grants are available to help fleets and individuals comply with California regulations earlier than is required. Loan assistance may also be available for small businesses with vehicles that operate at least 50 percent of the time in California to help purchase trucks, aerodynamic trailers, PM filters, aerodynamic retrofits or low-rolling resistance tires. Equipment owners are encouraged to apply as early as possible to maximize potential funding options.

**Replacements** - Up to \$60,000 in grant money per vehicle may be available to replace trucks with 2003 model year or older engines, with new or used trucks that operate at least 75 percent of the time in California.

**Retrofits** - Up to \$20,000 per vehicle is available to install PM filter exhaust retrofits. Limited grant funding is available for transport refrigeration unit retrofits or zero-emission technologies.

## FOR MORE INFORMATION

Please contact ARB's diesel hotline at 866-6DIESEL (866-634-3735) or email [8666Diesel@arb.ca.gov](mailto:8666Diesel@arb.ca.gov) or visit the TruckStop website at: [www.arb.ca.gov/truckstop](http://www.arb.ca.gov/truckstop). To obtain this document in an alternative format or language please call (800) 242-4450.